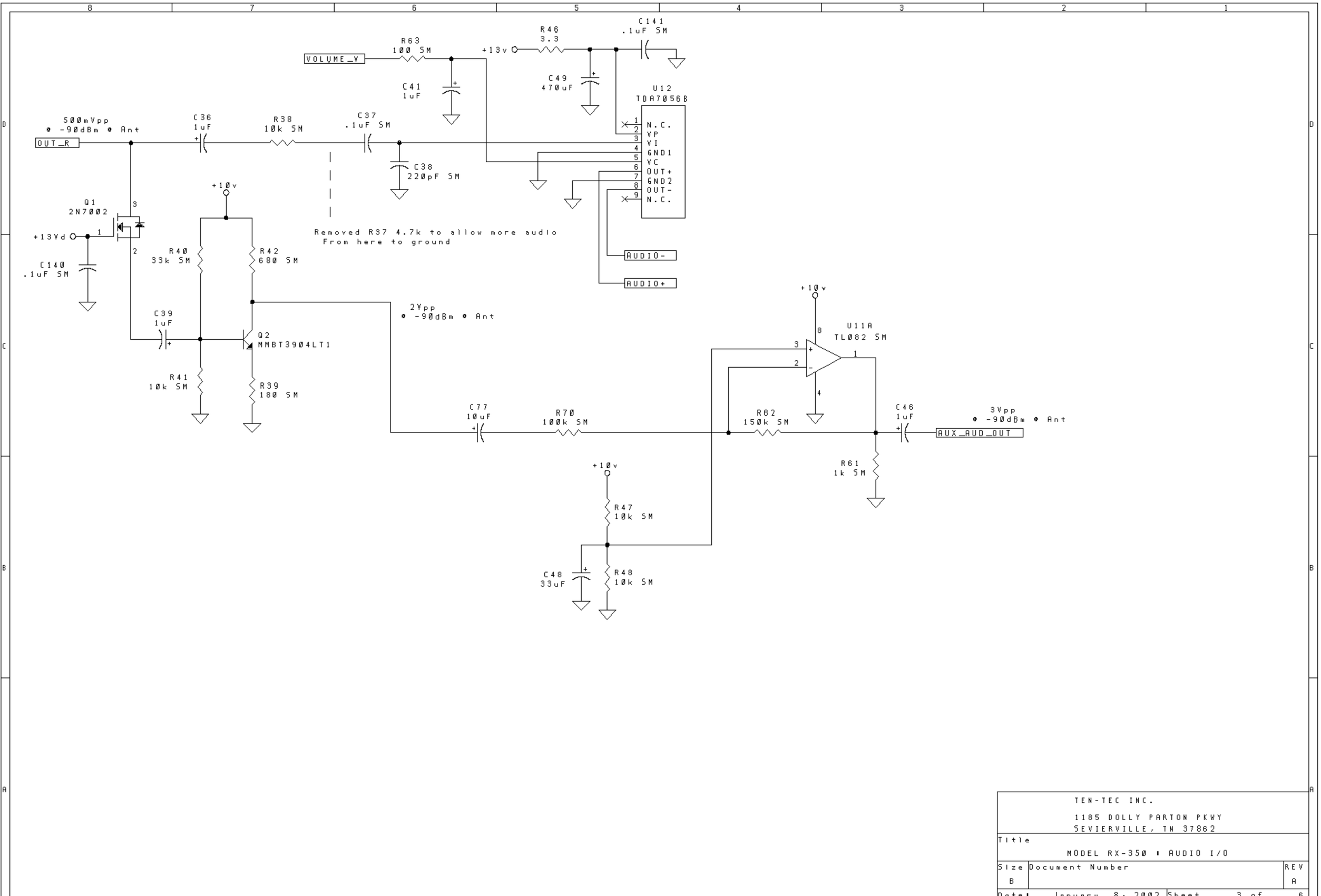
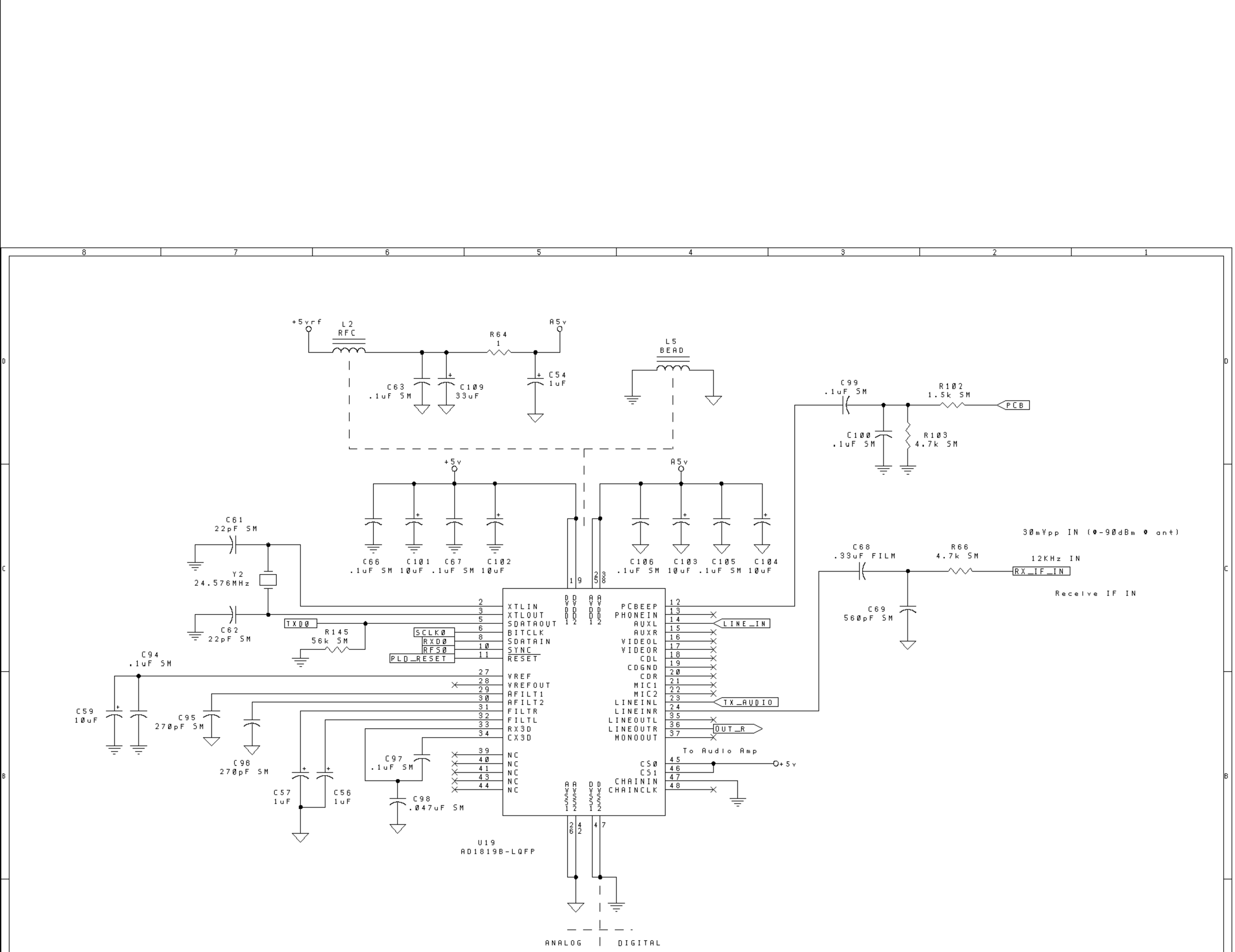
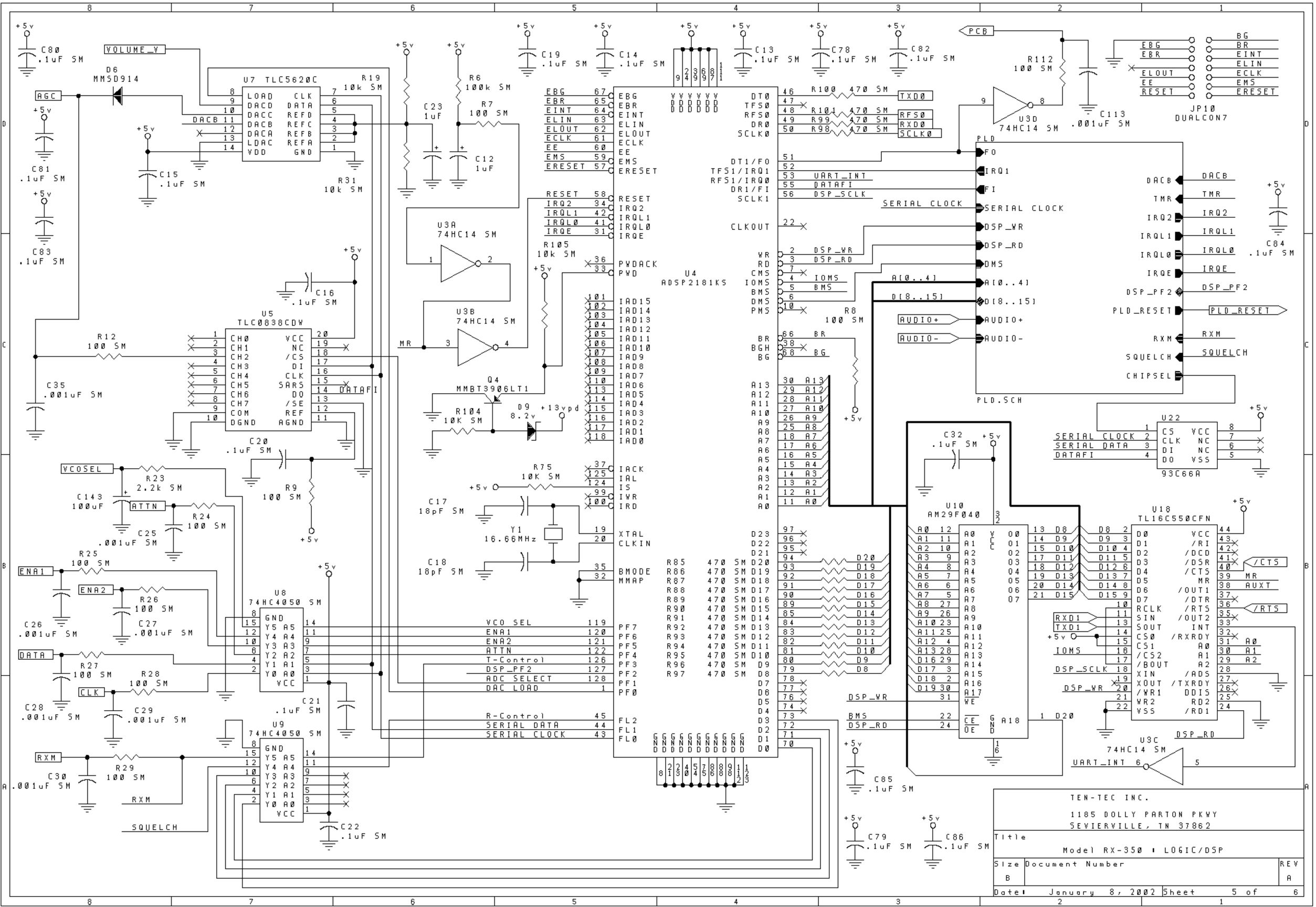


TEN-TEC INC.		
1185 DOLLY PARTON PKWY SEVIERVILLE, TN 37862		
Title: MODEL RX-350 : AUDIO I/O		
Size: B	Document Number	REV: A
Date: January 8, 2002	Sheet 3 of 6	



TEN-TEC INC.		
1185 DOLLY PARTON PKWY SEVIERVILLE, TN 37862		
Title: Model RX-350 : DSP SIGNAL I/O		
Size: B	Document Number	REV: A
Date: January 8, 2002	Sheet 4 of 6	


VOLUME_V
AGC
D6
MMSD914
U7 TLC5620C
LOAD CLK
DACD DATA
DACC REFD
DACB REFC
DACA REFB
LDAC REFA
VDD GND
R19 10k SM
R31 10k SM
C80 .1uF SM
C81 .1uF SM
C83 .1uF SM
C15 .1uF SM
R6 100k SM
R7 100 SM
C23 1uF
C12 1uF
C19 .1uF SM
C14 .1uF SM
C13 .1uF SM
C78 .1uF SM
C82 .1uF SM
U3A 74HC14 SM
U3B 74HC14 SM
R105 10k SM
C16 .1uF SM
U5 TLC0838CDW
CH0 VCC
CH1 NC
CH2 /CS
CH3 DI
CH4 CLK
CH5 SARS
CH6 DQ
CH7 /SE
COM REF
DGND AGND
R12 100 SM
C35 .001uF SM
C20 .1uF SM
R9 100 SM
Q4 MMBT3906LT1
R104 10K SM
D9 8.2v
+13vpd
MR
U4 ADSP2181KS
EBG EBR EINT ELIN ELOUT ECLK EE EMS ERESET
RESET IRQ2 IRQL1 IRQL0 IRQE
PWDACK PWD
IAD15 IAD14 IAD13 IAD12 IAD11 IAD10 IAD9 IAD8 IAD7 IAD6 IAD5 IAD4 IAD3 IAD2 IAD1 IAD0
IACK IAL IS IWR IRD
XTAL CLKIN
BMODE MMAP
PF7 PF6 PF5 PF4 PF3 PF2 PF1 PF0
FL2 FL1 FL0
DT0 TFS0 RFS0 DR0 SCLK0
DT1/FO TFS1/IRQ1 RFS1/IRQ0 DR1/FI SCLK1
CLKOUT
WR RD CMS IOMS BMS DMS PMS
BR BGH BG
A13 A12 A11 A10 A9 A8 A7 A6 A5 A4 A3 A2 A1 A0
D23 D22 D21 D20 D19 D18 D17 D16 D15 D14 D13 D12 D11 D10 D9 D8 D7 D6 D5 D4 D3 D2 D1 D0
R100 470 SM TXD0
R101 470 SM RFS0
R99 470 SM RXD0
R98 470 SM SCLK0
R85 470 SM D20
R86 470 SM D19
R87 470 SM D18
R88 470 SM D17
R89 470 SM D16
R90 470 SM D15
R91 470 SM D14
R92 470 SM D13
R93 470 SM D12
R94 470 SM D11
R95 470 SM D10
R96 470 SM D9
R97 470 SM D8
R8 100 SM
VCO SEL
ENA1
ENA2
ATTN
T-Control
DSP_PF2
ADC SELECT
DAC LOAD
R-Control
SERIAL DATA
SERIAL CLOCK
PCB
R112 100 SM
C113 .001uF SM
U3D 74HC14 SM
JP10 DUALCON7
PLD
FO IRQ1 FI SERIAL CLOCK DSP_WR DSP_RD DMS A[0..4] D[8..15] AUDIO+ AUDIO- RXM SQUELCH CHIPSEL
DACB TMR IRQ2 IRQL1 IRQL0 IRQE DSP_PF2 PLD_RESET
PLD.SCH
C84 .1uF SM
U22 93C66A
SERIAL CLOCK
SERIAL DATA
DATAFI
C32 .1uF SM
U10 AM29F040
U18 TL16C550CFN
/CTS /RTS MR AUXT A0 A1 A2
RXD1 TXD1 IOMS DSP_SCLK DSP_WR DSP_RD
U3C 74HC14 SM
UART_INT
C85 .1uF SM
C79 .1uF SM
C86 .1uF SM
C21 .1uF SM
C22 .1uF SM
R23 2.2k SM
C143 100uF
C25 .001uF SM
R24 100 SM
R25 100 SM
R26 100 SM
C26 .001uF SM
C27 .001uF SM
R27 100 SM
R28 100 SM
C28 .001uF SM
C29 .001uF SM
C30 .001uF SM
R29 100 SM
DATA
CLK
RXM
SQUELCH
TEN-TEC INC.
1185 DOLLY PARTON PKWY
SEVIERVILLE, TN 37862
Title
Model RX-350 : LOGIC/DSP
Size B
Document Number
REV A
Date: January 8, 2002
Sheet 5 of 6

+5v C123 .1uF SM
+5v C120 .1uF SM
+5v C121 .1uF SM
+5v C122 .1uF SM
+5v C124 .1uF SM
+5v C125 .1uF SM
+5v C126 .1uF SM
+5v C127 .1uF SM
+5v C128 .1uF SM
+10v C129 .1uF SM
+10v C130 .1uF SM
+10v C131 .1uF SM
+10v C132 .1uF SM

Board-to-Board Interconnect

JP1
1 RXM
6 AGC
7 RX
I/O 1

JP2
1 +13v
2 +RE6
3 VCO SEL
4 ATTN
5 ENA 2
6 ENA 1
7 DATA
8 CLK
+10vrf
I/O 2

DSP
AUDIO-
AUDIO+
PLD_RESET
PCB
TXD0
RXD0
SCLK0
RFS0
VOLUME_V
RXM
AGC
VCOSEL
ATTN
ENA2
ENA1
DATA
CLK
/RTS
/CTS
TXD1
RXD1
DSP.SCH

CODEC
RX_IF_IN
PLD_RESET
PCB
TXD0
RXD0
SCLK0
RFS0
TX_AUDIO
LINE_IN
OUT_R
CODEC.SCH

AUDIO
TX_AUDIO
AUX_AUDIO_IN
OUT_R
AUDIO+
AUDIO-
VOLUME_V
AUX_AUD_OUT
ANALOG.SCH

POWER/CONTROL
/RTS
/CTS
TXD1
RXD1
13VIn
POWERCON.SCH

J11
MT5
5 4 3 2 1

+10v C133 .1uF SM
+10v C134 .1uF SM
+10v C135 .1uF SM
+13v C136 .1uF SM
+13v C137 .1uF SM
+13vpd C138 .1uF SM
+13vpd C139 .1uF SM

TEN-TEC INC.
1185 DOLLY PARTON PKWY
SEVIERVILLE, TN 37862

Title
Model RX-350 : DSP FRONT PANEL RECEIVER

Size	Document Number	REV
B		A

Date: January 8, 2002 Sheet 1 of 6

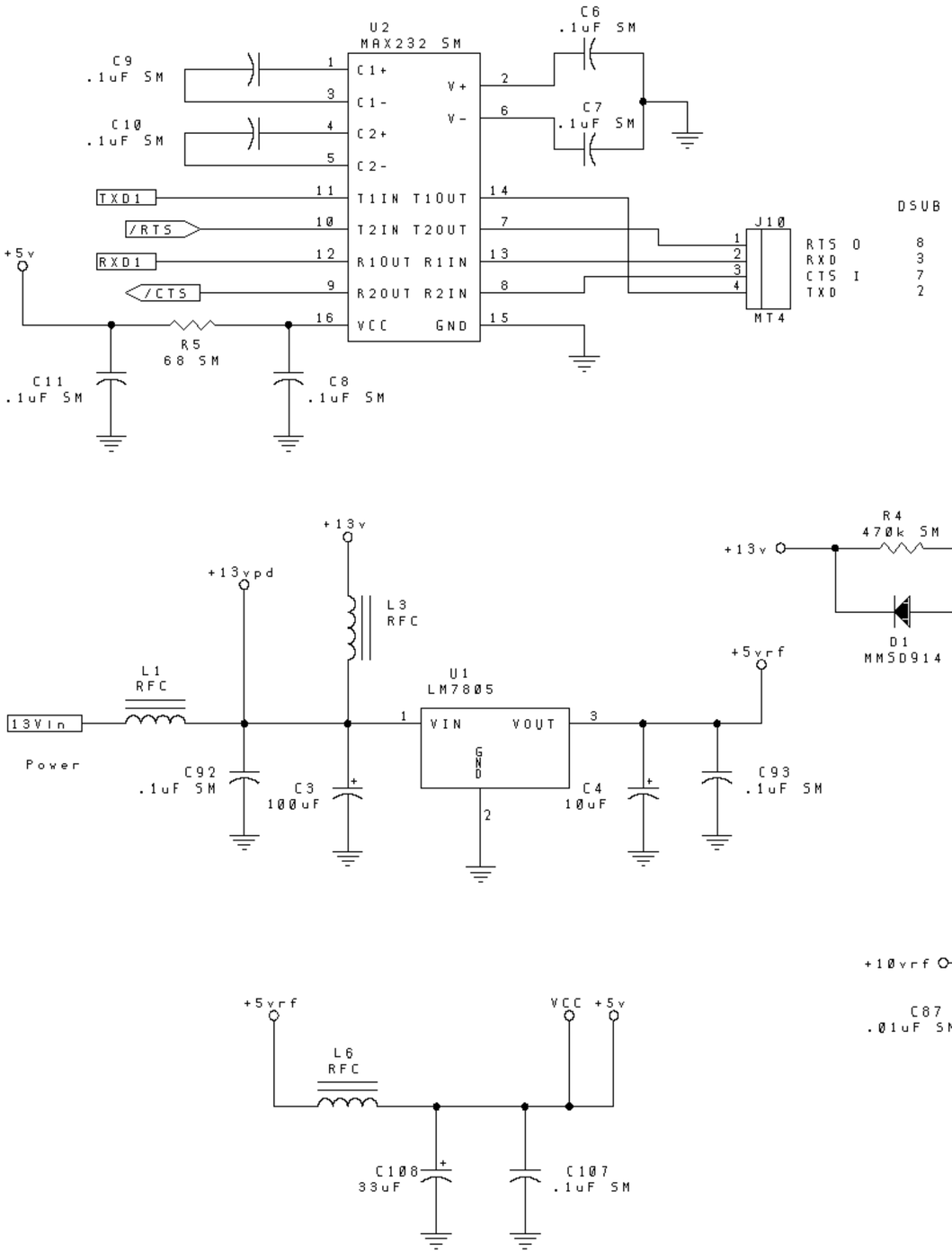
FROM DC INPUT
JP8
MT2
U21
LM7805
VIN
VOUT
GND
BACKLIGHT 500mA MAX
R124
4.7 SM
R116
4.7 SM
R117
4.7 SM
TO LCD
JP9
MT2
C111
.1uF SM
C112
.1uF SM
Q5
MMBT3906LT1
R107
4.7k SM
R106
10k SM
DACB
+5v
R113
10k SM
R114
10k SM
R133
100k BLUE POT
JP6
20 HEADER
1 FGND
2 GND
3 VDD
4 CONTRAST_ADJ
5 LCD_WR
6 LCD_RD
7 LCD_CE
8 LCD_I/D
9 N/C
10 RESET
11 LCD_D0
12 LCD_D1
13 LCD_D2
14 LCD_D3
15 LCD_D4
16 LCD_D5
17 LCD_D6
18 LCD_D7
19 FS
20 -15v
R108
2.2k SM
R125 10k SM
R126 10k SM
R127 10k SM
R128 10k SM
R129 10k SM
R130 10k SM
R131 10k SM
R132 10k SM
R123 10k SM
R122 10k SM
R121 10k SM
R120 10k SM
R119 10k SM
R118 10k SM
U20
XC9572
A[0..4]
D[8..15]
A0 1
A1 2
A2 3
A3 4
A4 5
D8 6
D9 7
D10 9
D11 10
D12 11
D13 12
D14 13
D15 14
DSP_WR
DSP_RD
DMS
IRQ2
IRQ1
IRQL0
IRQE
PLD_RESET
LOCKLED
IRQL1
CHIPSEL
TDI
TMS
TCK
TDO
FQ
DSP_PF2
SERIAL CLOCK
FI
JP12
CON6
JP13
CON6
C110
.1uF SM
C114
.1uF SM
R74
10k SM
D5
MMSD914
R73
10k SM
Q3
MMBT3904LT1
C73
.01uF SM
J9
MT4
MUTE
SQUELCH
TIMER OUT
GND
TMR
JP11
MT2
BACKLIGHT CONTROL
R115
15 SM
ON CABLE ASSEMBLY
R146
100
C144
220pF
GND
+5v
SCL
SDA
REM_PH1
REM_PH0
REMKEY_3
REMKEY_2
REMKEY_1
REMKEY_0
JP3
10 HEADER
R142 100k SM
R141 100k SM
R143 10k SM
R140 10k SM
R144 10k SM
R139 10k SM
FPKEY_R0
FPKEY_R1
FPKEY_R2
FPKEY_R3
FPKEY_R4
FPKEY_C0
FPKEY_C1
FPKEY_C2
FPKEY_C3
FPKEY_C4
FPKEY_C5
ENCA_PH0
ENCA_PH1
ENCB_PH0
ENCB_PH1
ENCC_PH0
ENCC_PH1
ENCD_PH0
ENCD_PH1
ENCE_PH0
ENCE_PH1
RXMUTELED
SQULCHLED
LOCKLED
AUDIO+
AUDIO-
JP7
30 HEADER
R109
470 SM
RXM
R110
470 SM
SQUELCH
R111
470 SM
LOCKLED

TEN-TEC INC.
1185 DOLLY PARTON PKWY
SEVIERVILLE, TN 37862

Title
MODEL RX-350 : PLD

Size B | Document Number | REV

Date: January 8, 2002 | Sheet 6 of 6



TEN-TEC INC. 1185 DOLLY PARTON PKWY SEVIERVILLE, TN 37862		
Title MODEL RX-350 : POWER/CONTROL		
Size B	Document Number	REV A
Date: January 8, 2002	Sheet 2 of 6	